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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/824,730

04/15/2004

Philip Jacoby

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EXAMINER

CHEVALIER, ALICIA ANN

ART UNIT

PAPER NUMBER

1794

MAIL DATE

DELIVERY MODE

01/24/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/824,730

Applicant(s)

JACOBY, PHILIP

Examiner

Alicia Chevalier

Art Unit

1794

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 October 2007.
- 2a) ☒ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 10,11 and 13-36 is/are pending in the application.
- 4a) Of the above claim(s) 11,17-24 and 34-36 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 10, 13-16 and 25-33 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 6/26/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

RESPONSE TO AMENDMENT

1. Claims 10, 11 and 13-36 are pending in the application, claims 11, 17-24 and 34-36 are withdrawn from consideration. Claims 1-9 and 12 have been cancelled.
2. Amendments to the claims, filed on October 26, 2007, have been entered in the above-identified application.

REJECTIONS

3. **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

Claim Rejections - 35 USC § 103

4. Claims 10, 12-16, 25-29, 31 and 34 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mercer (U.S. Patent No. 4,374,798) in view of Jacoby et al. (U.S. Patent No. 5,310,584).

Mercer discloses a polypropylene web comprising a perforated sheet (*figures 1 and 2*) that is biaxially oriented and wherein the web has thickness in the node junction region between the machine direction and transverse direction strands (*col. 2, lines 35-60*).

Mercer fails to disclose a polypropylene web comprising a propylene polymer comprising beta-spherulites in an amount sufficient to produce a K-value of about 0.2 to 0.95 when measured by x-ray diffraction or to show a beta crystalline melting peak during the first or second heating scan when measured using a differential scanning calorimeter.

Jacoby '584 discloses a polypropylene sheet (title) comprising a propylene polymer comprising beta-spherulites in an amount sufficient to produce a K-value of about 0.2 to 0.95 (*col. 3, lines 15-18*). The sheet exhibits improved sidewall strength, reduced warp, improved low-temperature impact resistance etc. (*col. 3, lines 20-30*). The propylene polymer is selected from polypropylene homopolymer and copolymer of polypropylene containing other alpha-olefin monomers (*col. 6, lines 20-39*).

It would have been obvious to one of ordinary skill in the art at the time of the invention to use Jacoby '584's polypropylene material as the polypropylene material in Mercer in order to improve the strength of the sheet.

The limitations "can be run at line speeds ..." and "at least 10% less than that of a biaxially oriented web made from an extruded sheet with no added beta nucleant and the same starting sheet thickness" and "tensile strength ..." are functional limitations and are deemed to be a latent property of the prior art since the prior art is substantially identical in composition and/or structure. MPEP 2145 (II).

The limitation "extruded" is method limitation and does not determine the patentability of the product, unless the process produces unexpected results. The method of forming the product is not germane to the issue of patentability of the product itself, unless Applicant presents evidence from which the Examiner could reasonably conclude that the claimed product differs in kind from those of the prior art. MPEP 2113.

5. Claims 30 and 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mercer (U.S. Patent No. 4,374,798) in view of Jacoby et al. (U.S. Patent No. 5,310,584) as applied above, and further in view of Jacoby et al. (U.S. Patent No. 4,975,469).

Mercer and Jacoby '584 are relied upon as described above.

Mercer and Jacoby '584 fail to disclose the claimed beta-nucleating agent structural formula. However, Jacoby '584 further discloses that quinacridone colorant Permanent Red E2B is particularly effective as a beta-spherulite nucleating agent (*col. 8, lines 22-40*). However, Jacoby '584 quinacridone does not have the same structural formula as claimed by applicant.

Jacoby '469 teach using known beta-nucleators such as quinacridone colorant Permanent Red E2B, with the same structural formula as claimed by applicant (*col. 5, lines 14-25*). The nucleating agent provides the beta-form spherulites in a more controlled distribution and size (*col. 5, lines 5-13*).

It would have been obvious to one of ordinary skill in the art at the time of the invention to the beta-nucleating agent of Jacoby '469 as the beta-nucleating agent in the combination of Mercer and Jacoby '584 in order to provide the beta-form spherulites in a more controlled distribution and size.

ANSWERS TO APPLICANT'S ARGUMENTS

6. Applicant's arguments in the response filed October 26, 2007 regarding the 35 U.S.C. 103 rejection over Mercer in view of Jacoby '584 of record have been carefully considered but are deemed unpersuasive.

Applicant argues that Mercer teaches the stretching of a perforated sheet in the solid state to produce high tensile strength mesh ... and Jacoby '584 discloses thermoformed sheet with improved properties and therefore would discourage employing beta-nucleating additives to

produce the extruded sheet, as this would decrease its solid state character during the orienting process at conventional temperatures.

First, Applicant has not provided any evidence to show that the combination of Mercer and Jacoby '584 would decrease its solid state character during the orienting process at conventional temperatures. Attorney argument is not evidence unless it is an admission, in which case, an examiner may use the admission in making a rejection. See MPEP § 2145 I. Second, Mercer does disclose heating the sheet while stretching (*col. 11, lines 30-53 and col. 16, lines 42-49*). Therefore, without evidence the examiner maintains that the combination of Mercer in view of Jacoby '584 obviates the instant claimed invention.

Applicant argues that beta nucleation would not have been expected to improve the properties of the sheet used to make the plastic mesh of Mercer in the manner that beta nucleation improved the thermoformable sheet of Jacoby '584.

The fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be the basis for patentability when the differences would otherwise be obvious.

Applicant further discusses samples from the specification which show the invention and samples "analogous" to Mercer. The samples clearly show an improvement over the Mercer reference alone, however, they do not show why the combination of Mercer in view of Jacoby '584 is not obvious. Furthermore, Applicant's Declaration filed October 26, 2007 is merely an opinion and possible notification of an infringement issue.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

8. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Alicia Chevalier whose telephone number is (571) 272-1490. The examiner can normally be reached on Monday through Friday from 8:00 am to 4:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rena Dye, can be reached on (571) 272-3186. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR

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system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ac
1/20/08

ALICIA CHEVALIER
PRIMARY EXAMINER